product user guide

mabey hire
all the support you need

Title	Issue	Date
4.5m Trench Crossing Units	7	Feb 2015

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1. Introduction

Mabey 4.5m Trench Crossing Units are intended to provide temporary vehicular access over trenches. They are not intended for other purposes.

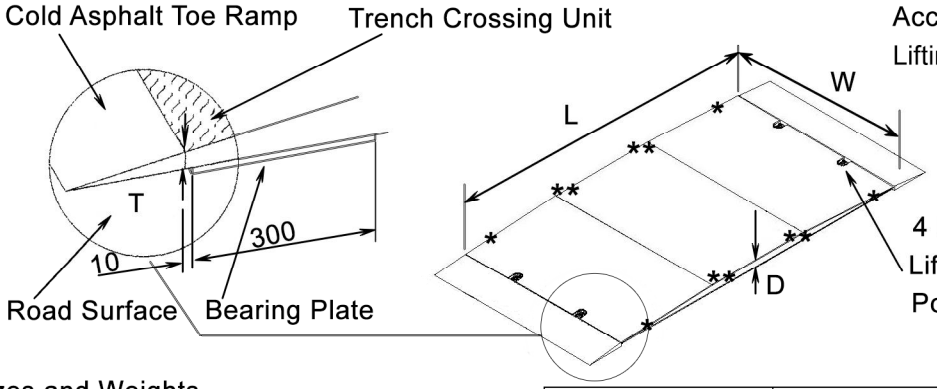
1.1 In all applications the user should ensure that:

- The sides of the trench to be crossed are adequately shored to support the reactions from the trench crossing units when under service loading.
- The units are adequately restrained against longitudial or lateral movement.
- The speed of traffic using the crossing is limited to a maximum speed of 5 m.p.h.

1.2 In certain applications the user may have to make his own separate arrangements for:

- Adequate parapets, kerbs or handrails.
- Improved skid resistance over and above that provided by the Durbar plate running surface.
- Ensuring that the vertical profile of the crossing arrangement is suitable for the traffic intended to use it.
  Note: Some types of vehicle with low ground clearance and/or particularly long/short wheelbases may be susceptible to 'grounding'. (Eg. Low loaders and some types of buses).
- Cyclists and riders on horseback to be either prohibited or instructed to dismount before crossing the units.
- Protection of the Durbar plate running surface, when crawler vehicles are to cross the units. Plywood sheeting or conveyor belting are commonly used.

2. Identification: Sizes of Units, Weights and Carrying Capacities



Accessories

Lifting Chains: (PSP-155) 7mm 4 Leg Chain Sling.
Weight: 24kg
Refer to Lifting Chain User Guide for further details.

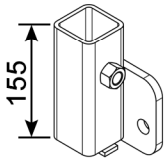
* QB-016 Socket Locations
** QB-020 Socket Locations

2.1 Sizes and Weights

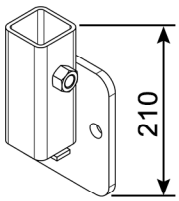
Running Surface: Durbar Plate
Finish: Galvanised

NOTE: Only the QB-020-MOD and QB-AS-120-MOD units currently accept the Post Socket brackets

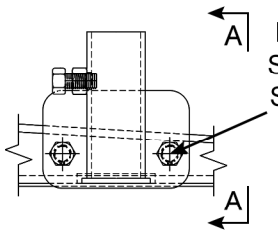
Code No.	Dimensions (mm) L	W	D	T	Running Surface	Weight (kg)
QB-020	4500	1725	140	40	Durbar Plate	1410
QB-AS-120	4500	1725	140	40	Anti-Skid Coating	1490
QB-020-MOD	4500	1725	140	40	Durbar Plate	1410
QB-AS-120-MOD	4500	1725	140	40	Anti-Skid Coating	1490



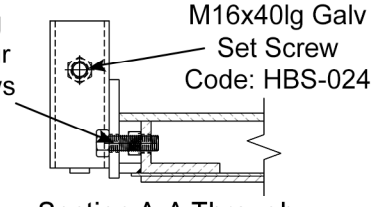
Post Socket
Code: QB-016-SOCKET
Weight: 2.6kg



Post Socket
Code: QB-020-SOCKET
Weight: 3.3kg



View on Post Socket

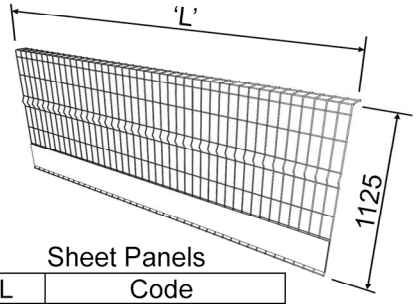


Section A-A Through Post Socket

2.2 Carrying capacity: Single Vehicles either:

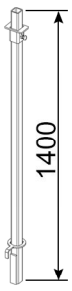
- Conforming to the Construction and Use Regulations: i.e. cars, buses, lorries up to 40 tonnes G.V weight.

or • Crawler machines up to 20 tonnes G.V. weight.

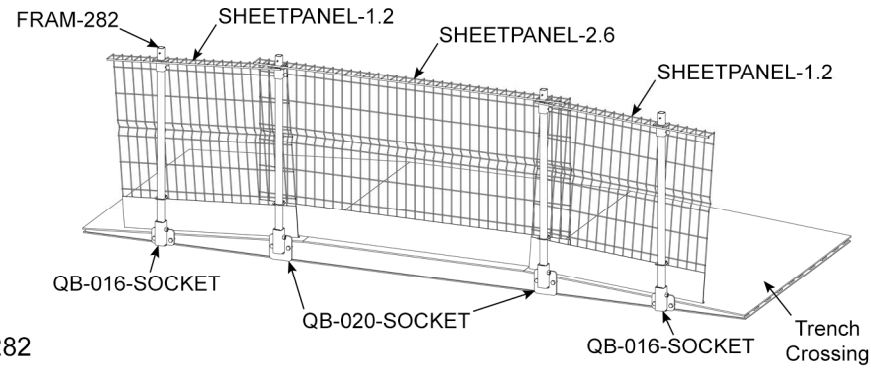


Sheet Panels

L	Code
1200	SHEETPANEL-1.2
2600	SHEETPANEL-2.6



Post
Code: FRAM-282



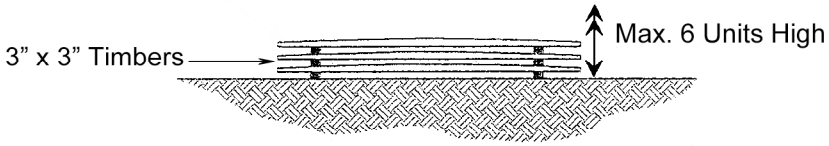
Edge Protection Assembly Detail

3. Stacking and Handling

Suitable firm level storage areas should be made available on site for stacking.

Suitable lifting equipment of adequate capacity should be provided for off-loading and installation.

Slinging should always be carried out by suitably experienced and competent personnel. The weight of each unit is given overleaf.

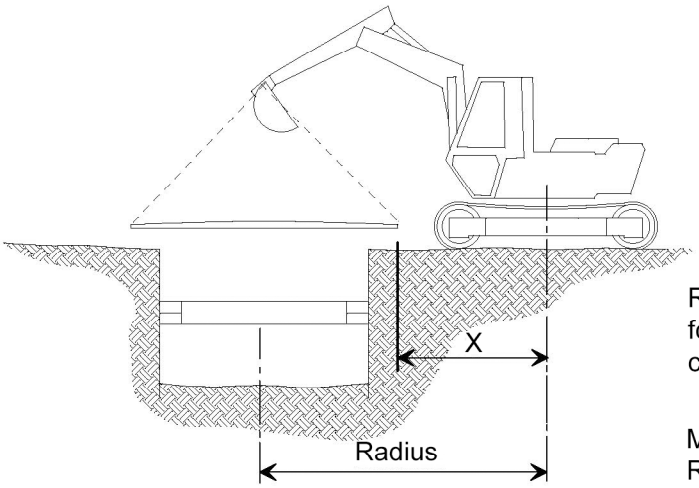


4. Transportation

Ensure that the stacks are securely restrained to the vehicle bed.

5. Installation

5.1 Excavator or crane lifting requirements when positioning units over trench



Refer to manufacturer for machine load capacity.

X=Dimension from rear of unit to centre line of crane/excavator when standing a safe distance from the trench.

Max Lift = Unit wt. + wt. of chains (see page 1).
Radius = 1/2 length of unit + x

5.2 Method of installation (Dismantling is the reverse procedure)

Simply crane into position onto the previously prepared foundation. When in position, ensure units are adequately restrained against movement.

Install asphalt toe ramps or similar.

Install kerbs, handrails or parapets as appropriate.

6. In-Service Checks

Regularly inspect the trench walls to ensure the trafficked units are not overloading them. Check that the units are not moving longitudinally or spreading laterally under trafficking.

7. General

Since our policy is one of continual improvement, components may vary in details from the description given in this publication.